

GLOSSARY OF TERMS

This glossary is provided to define and clarify terms and phrases that may appear in your inspection report.

ABS - Black plastic pipe and fittings. Generally used in waste water and drainage systems. Popular for new residential construction and remodeling.

AIR CONDITIONING - The process of treating air to control its temperature, humidity, cleanliness and distribution.

AIR FILTER - A furnace filter installed in line with the cold air return which filters out dust and debris and prevents its re-entry into the occupied interior.

AIR RETURN - A furnace duct through which interior air returns to the furnace. The cool air is circulated through the heat exchanger, warmed, and redistributed through the ducts.

AIR POCKET/BLISTER - A bubble in the roofing surface formed by water vapor expanding between the layers of a built-up roofing membrane. This condition can reduce the useful life of the roofing surface and is conducive to moisture penetration and subsequent leakage.

ALUMINUM WIRING - A type of conductor used to carry current. The U.S. Consumer Product Safety Commission has determined that aluminum wiring used in 120 Volt light and outlet circuits can be hazardous and a cause of fire. A failure can occur because aluminum wire behaves differently than copper wire when current travels through the conductor. An aluminum wire will expand and contract more than a copper wire. The expansion and contraction can result in loose connections. The loose connections can oxidize. The loose, oxidized connections can spark or overheat when current flows to the connection. The spark or overheating can cause a fire. This potential problem has nothing to do with the wires in the walls, floors or ceilings. This problem occurs only at the connections. It is possible to control and repair this condition. Typically, aluminum is no longer used in the individual branch lighting and receptacle circuits. It is still commonly used and approved to bring power to a structure and to energize the distribution panels as well as power the individual appliance circuits. Aluminum wire should only be connected to listed and rated devices (breakers, outlets, switches, etc.). Additionally, these devices should have an antioxidant installed to cover the connections.

AMP - Short for Amperes. A measure of the amount of electrical current going through a circuit at any given time.

ANCHOR BOLT - A threaded bolt, usually embedded in a foundation, for securing a sill, framework, or machinery.

ANGLE STOP - A shut-off valve arranged in a 90-degree configuration. It is used to shut off the flow of water to a fixture.

ANTI-SIPHON VALVE - A device installed on irrigation piping designed to prevent the drawing of contaminated ground water into the domestic water supply system.

ASBESTOS - Asbestos is a naturally occurring mineral fiber extensively used in construction. Nearly every building contains asbestos in some form. It may be found in vinyl flooring, patching compounds and textured paints, sprayed acoustic ceilings, acoustic ceiling tiles, stove insulation, furnace insulation, pipe insulation, wall and ceiling insulation, roofing

shingles and siding as well as appliances. Exposure to asbestos can be a serious threat to one's health. There are a number of choices available for dealing with asbestos. They include leaving it alone, encapsulation and abatement. Removal of this material is a specialized procedure and should be attempted only by a qualified and licensed expert. Information regarding identification of asbestos, its hazards and safe removal may be obtained from the U.S. Consumer Product Safety Commission, Environmental Protection Agency and other governmental agencies.

AUTOMATIC SAFETY CONTROLS - Devices designed and installed to protect systems and components from excessively high or low pressures and/or temperatures, excessive electrical current, loss of water, loss of ignition, fuel leaks, fire, freezing, or other unsafe conditions.

AUTOMATIC GARAGE DOOR OPERATOR DOES NOT REVERSE - The garage door was tested and did not automatically reverse. This indicates that the door opener does not have an auto-reverse mechanism, it is broken or it needs adjustment. We recommend that the opener be modified, replaced or adjusted as necessary.

BALLOON FRAMING - A type of framing system where the studs extend from the sill to the roof.

BLOWER - A fan in a furnace or air conditioning unit which blows air through ducts.

BLOWER BEARINGS WORN - The forced-air furnace fan bearings are worn. The fan bearings should be lubricated if possible. Damaged bearings may need to be replaced. It is possible that the fan itself may need replacement.

BOILER - A heating device which heats hot water or creates steam for circulation in heating pipes, radiators, baseboards or convectors.

BOILER LEAKS - Boiler leaks must be repaired or there may be a loss of heat and the boiler may be damaged beyond repair.

BRASS GAS CONNECTOR - Brass is made of zinc and copper. The sulfur in the natural gas reacts with the copper and can cause the piping to become brittle, deteriorate and leak. We recommend that this tubing be removed and replaced with an approved gas supply connector.

BREAKER BRIDGE MISSING - A 240 volt double pole breaker installed without a bridge between the two pole handles. We recommend that this breaker be bridged. This will insure that all of the power is shut off to this circuit if the overcurrent protection device is tripped.

BRIDGING - Short, structural members crisscrossed between floor or ceiling joists to provide reinforcement and distribution of stress.

BRITTLE SURFACE - The roofing surface is brittle and subject to breakage. This condition is an indication of age and suggests that the roofing surface is near the end of its useful life.

BROKEN/FRAYED SASH CORDS - The cords along each side of a double hung window which are attached to counter weights in the wall. The sash cords hold the window open. The window will not stay open by itself if they are broken. Frayed sash cords are likely to break. These sash cords should be replaced to ensure that the windows remain operable.

BTU - British Thermal Unit, a unit of measure of heat. One BTU is the quantity of heat needed to raise the temperature of one pound of water one Fahrenheit degree.

CAULK/SEAL GAPS - Gaps in the exterior of the building around the doors, windows and plumbing and electrical entry points. All gaps should be caulked and sealed to prevent heat loss, air infiltration and moisture entry.

CELLULOSE DEBRIS - Scrap-wood found in the substructure soil area. This debris can result in the infestation and infection of wood-destroying pests and/or organisms. It should be removed.

CIRCUIT - The path of electricity away from and back to its source.

CIRCUIT BREAKER - An overcurrent protection device which automatically opens an electrical circuit when too much current flows through the conductor.

COMPRESSOR - A pump which forces refrigerant through an air conditioning system.

COMPRESSOR SHORT CYCLES - A suspected compressor defect. A qualified air conditioning contractor should be contacted to evaluate the air conditioning system and determine the corrective measures needed.

CONDENSATION - In a building: Beads or drops of water that accumulate on the inside of the exterior covering of a building when warm, moisture-laden air from the interior reaches a point where the temperature no longer permits the air to sustain the moisture it holds. The use of louvers or attic ventilators will reduce moisture condensation in attics. A vapor barrier under the gypsum lath or dry wall on exposed walls will reduce condensation in them. A plastic vapor barrier over damp subarea soil will help create a dry air space between the damp soil and the floor framing, thereby helping to limit the amount of moisture that is able to rise into the framing.

CONDUCTOR - An electrical wire capable of carrying current.

CONDUIT - A hollow pipe (metal or plastic) casing through which electric wires run.

CONVECTION - The transfer of heat by the motion of the heated matter.

COPPER GAS CONNECTOR - Sulfur in natural gas reacts with copper and can cause the connector to deteriorate and leak. We recommend that copper tubing be removed and be replaced with an approved gas supply connector.

CRACKED HEAT EXCHANGER - A fracture in the walls of the furnace combustion chamber. The heat exchanger separates the flame and combustion products from the air chamber. A crack in the heat exchanger may allow the products of combustion to enter the occupied interior. One of the products of combustion is carbon monoxide. In addition to carbon monoxide, natural gas combustion produces formaldehyde gas. Depending on the authority and study published, acceptable levels of carbon monoxide and formaldehyde gas in an indoor environment vary greatly. There are a number of testing methods practiced to determine if a heat exchanger is cracked. They can be reduced to a two step process. First, a visual inspection with a flashlight can reveal a crack, which can be confirmed by feel to insure that it is not simply discoloration or distortion. Another first step is flame observation. The furnace flame is observed before and after the circulating air comes on. Floating flames, flame rollout

and flame distortion can indicate a failure of the heat exchanger. The second step is tracer gas. A tracer gas is injected into the combustion chamber and a calibrated gas detector is used to check for the presence of the tracer gas on the air side of the heat exchanger. Neither visual inspection nor flame distortion should be used to confirm the other. The most common course of action is to replace the furnace.

CRACKED MASTIC - Cracks in the roof cement coating used to seal the roof connections and penetrations. This creates a condition conducive to moisture penetration and subsequent leakage. We recommend that these areas be repaired as necessary to prevent leakage.

CRACKED/DETERIORATED MORTAR - Cracks and deterioration in the mortar used to seal the tile roof joints. This creates a condition conducive to moisture penetration and subsequent leakage. Cracked and deteriorated tile mortar should be replaced.

CRACKS IN INTERIOR WALLS/CEILINGS - Hairline cracking in the interior walls and ceilings, as well as minor sloping and sagging of floors and door casings, should be expected as a result of ordinary settlement and expansion of the foundation system, structural framing, and soil. These conditions do not, in our opinion, represent a failure of the framing system. We are not registered engineers. Additional information concerning settlement of the structure and building site, would have to be obtained by retaining a qualified registered engineer.

CREOSOTE - One of the by-products given off when burning wood. Creosote condenses on the walls inside the fireplace chimney. It is highly combustible and, if sufficiently heated, can ignite and start a flue fire. Fireplaces and chimneys should be cleaned annually or when one eighth to one quarter of an inch of creosote accumulates.

CURRENT - A flow of electric charge.

DAMAGED CONDUCTOR INSULATION - We found damaged service conductor insulation. We recommend that all exposed conductors be repaired or replaced as necessary.

DAMAGED RAFTERS - Damage to any of the parallel beams that support a roof. All damaged rafters should be reinforced or replaced. Sometimes the rafters extend beyond the exterior walls. These rafter tails are subject to moisture damage. They must be maintained or damage will result.

DAMAGED SHEATHING - Damage to the material used to cover the outside wall of a frame house or a timber roof. We recommend that all damaged material be replaced.

DEAD-FRONT - Switches, circuit breakers, switchboards, control panels and panel board fronts must be covered so that no current-carrying parts are exposed. This cover is called a Dead-Front.

DEBRIS ON ROOF OR IN GUTTERS - Gutters filled with debris should be cleaned to ensure proper drainage. Roofing surfaces covered with debris should be cleaned not only to ensure proper drainage but also to prevent premature deterioration of the roof surface.

DECK MOISTURE MEMBRANE FAILED - See moisture membrane.

DECK RAILING UPGRADE - We recommend that all decks and landings 30 inches or more above the ground have a railing. The railing should be at least 36 inches high and the spacing between the railing pieces should be no more than four inches.

DOUBLED-UP BRANCH CIRCUIT – Two circuits controlled by one overcurrent protection device. This wiring method increases the possibility of tripping the overcurrent protection device. Each circuit should be separately fused with an overcurrent protection device of appropriate amperage.

DOWNSPOUT/GUTTER LEAKS - A leaking gutter or downspout can allow water to penetrate a sidewall and enter the occupied interior through a foundation wall or slab. Deteriorated gutters and downspouts should be repaired or replaced as necessary.

DRIP LOOP - A loop in each of the overhead electrical service entrance conductors designed to prevent the passage of moisture into the weatherhead service raceway or equipment.

DUCTS - Metal piping used for distributing warm or cool air.

EARTH-WOOD CONTACT – Wood in contact with dirt. This condition is conducive to the infestation and infection of wood-destroying pests and/or organisms. We recommend that all earth-wood contacts be broken and any damaged or deteriorated material be replaced.

EAVE - The part of the roof which extends beyond the sidewall.

EFFLORESCENCE - A deposit of soluble salts, usually white, on the surface of concrete and masonry walls due to evaporation of water.

ELECTROMAGNETIC RADIATION – Electromagnetic fields are produced by alternating current in electric wires. There are two components: an electric charge and a magnetic force, resulting in electromagnetic radiation. High current power lines are a source of electromagnetic fields. Studies have suggested a possible increase in leukemia, cancer and miscarriages from exposure to electromagnetic radiation. Studies are currently in progress to help quantify the risks. More information can be obtained from the local utility company, U. S. Department of Energy (202) 586–5000 and the U. S. Environmental Protection Agency (202) 260–7676.

EXPOSED AND ACCESSIBLE – Our inspections are limited to a visual review of those areas of the premises which are exposed to view. Any area which is not exposed to view, or is otherwise inaccessible because of soil, walls, floors, ceilings, carpets, furnishings, storage, or any other things, and is concealed, is not included in our inspection. Our inspection does not include any destructive testing or dismantling of equipment, systems, or surfaces. With access and an opportunity for examination, reportable conditions may be discovered. If inspection of inaccessible areas is desired, this will be performed upon arrangement at an additional cost to the interested parties at such time as access can be provided.

EXPOSED WIRING - Wiring or connections not properly covered and protected. We recommend that all of these connections be repaired and be properly protected.

EXPOSED ROOF FASTENERS - An indication of significant roofing surface wear or poor installation. This creates a condition conducive to moisture penetration and subsequent leakage into the occupied interior. All exposed fasteners should be covered.

EVAPORATION COILS - The part of the air conditioning system where the refrigerant returns to gaseous form. Frequently located in the furnace plenum.

FAILED - Something that no longer functions as designed or intended.

FASCIA - A flat, vertical board enclosing the overhang under the eave that runs along the roof edge.

FELT EXPOSED/WORN - An indication of significant roofing surface wear. Prolonged exposure to the sun can damage the felt. Damaged felt can result in moisture penetration and subsequent leakage into the occupied interior. The deteriorated roofing surface should be repaired, all damaged felt replaced, and exposed felt covered.

FIRE-RESISTIVE BARRIER – A fire-resistive separation barrier. Fire-resistive walls may not have been required at the time of construction. Present building code requires a one-hour fire-resistive barrier between the garage and the occupied interior. The purpose of this barrier is to prevent the spread of fire from the garage into the living areas. Flammable liquids are often stored in the garage. The risk of a fire starting in the garage is significant enough to warrant recommending that a one-hour fire-resistive barrier be installed.

FLASHING - Material used at connections and penetrations in a roof or wall to prevent leakage.

FLASHING DEFECTIVE - Flashing installed improperly which creates a condition conducive to moisture penetration. The connections and penetrations must be repaired to prevent leakage.

FLASHING INADEQUATE - Insufficient flashing. This condition often leads to leakage. We recommend that all door, window, deck and roof connections and penetrations be properly flashed to prevent moisture penetration.

FLATWORK - A concrete or asphalt surface such as a sidewalk, driveway or patio. Any cracks should be patched and any holes or gaps filled. The flatwork should be examined periodically for signs of failure or further deterioration and repairs made if necessary. Replacement may be necessary at some point in time.

FLEXIBLE GAS CONNECTOR - Older installations of gas-fired appliances often use rigid gas piping. This piping is subject to damage in the event of support movement. We recommend that all gas-fired appliances be equipped with flexible gas connectors or swing joints as appropriate. This should help reduce damage in the event of an earthquake.

FORCED-AIR SYSTEM - A heating system in which air is heated in a furnace and distributed through a structure aided by a blower.

FORMALDEHYDE – Colorless, pungent gas used as raw material in manufacture of particle board, decorative paneling, fiberboard, wafer board, carpeting, permanent-press fabrics and foam insulation. Heat & humidity increase the level of emission, however, the rate diminishes as materials age. The U.S. Environmental Protection Agency classifies formaldehyde as a possible carcinogen. Formaldehyde can also irritate the eyes, nose and throat, and cause headaches and dizziness. Formaldehyde levels can be reduced by increasing ventilation, reducing temperature and humidity and reducing the number of new pressed-wood products in a home. Removal of wood paneling or subflooring is sometimes necessary. More information is available from the U. S. Environmental Protection Agency (202) 260–2080.

FORM-WOOD - Wood used in the forming of a concrete foundation or retaining wall, typically removed after the concrete has set. If it is left in place, it can lead to the infestation of wood-destroying pests. We recommend that all form wood be removed.

FOUNDATION - Construction below or partly below grade, which provides support for exterior walls or other structural parts of the building.

FOUNDATION OUTDATED - An old foundation that is weak and subject to failure because of its age, condition and design. A brick foundation would be an example. Although an outdated foundation may not have failed, it is likely to be severely damaged in the event of seismic activity and is more susceptible to moisture damage. Replacement may not be necessary now, but may be necessary at some point in the future. Unfortunately, it is difficult to determine when to act. Obviously, if one waits until it fails, one waited too long.

FROZEN FIXTURE SHUT-OFF VALVES - Plumbing shut-off valves that no longer turn. This occurs when the valves are seldom operated. An inoperable valve prevents the water from being turned off if it is necessary to repair the fixture. We recommend that they be repaired and be made operable again.

FUNCTIONAL DRAINAGE - A plumbing drain is functional when the fixture empties in a reasonable amount of time, and does not overflow when another fixture is drained simultaneously.

FUNCTIONAL FLOW - A reasonable flow at the highest fixture in a dwelling when another fixture is operated simultaneously.

FUSE - An overcurrent protection device with a circuit opening fusible member directly heated and destroyed by the passage of too much current through it.

FUSED NEUTRAL - Where an electrical neutral wire is fused. If the fuse on the neutral wire blows, the circuit will be open, and the fixtures and/or appliances on this circuit will not function. However, power will still be present through the circuit, right up to the outlet. This creates a shock hazard. We recommend that this condition be corrected.

GABLE ROOF - A roof with two pitches, designed to provide more space on the upper floors.

GALVANIZED PIPE - Steel pipe with a protective zinc coating. Used for supply of domestic water and waste and vent piping.

GARAGE DOOR SPRINGS - Prior to 1976, the counter balance springs used for tilt-up garage doors were not provided with a safety device to control spring breakage. Without the benefit of a safety device, it is possible that pieces of the spring may fly across the garage upon accidental breakage. We recommend that the garage door springs be upgraded.

GATE VALVE - A shut-off valve using a rising disc (gate) to control liquid flow.

GFCI - Ground Fault Circuit Interrupter: a safety device which monitors the difference between current flowing through the hot and neutral wires of a receptacle. If there is an imbalance of current greater than five milliamps, the current will be cut off in less than a second. GFCI protection is recommended in the garage, outdoor and bathroom receptacles. We also recommend that all pool and spa equipment have GFCI protection. We further recommend that all kitchen receptacles within six feet of a sink be equipped with GFCI devices. This will reduce shock and short hazards.

GRADE - The ground level around a structure. When the ground is less than six inches below the top of the foundation it is considered a marginal grade. A faulty or marginal grade can lead to moisture damage and/or pest control problems. If damage is discovered, we recommend that the height of the foundation be raised to a minimum of six inches above the ground and that all damaged material be replaced. If no damage is present, we recommend that this area be periodically reviewed by a qualified individual for signs of damage. Repairs should be made if necessary.

GROUND CONDUCTOR SPLICES AND LOOSE CONNECTIONS - The system ground is ineffective because of splices and loose connections in the grounding conductor. We recommend that the grounding conductor be repaired or replaced as necessary.

GROUND RECEPTACLES - A random sampling of individual receptacles found these to be operable but some are not grounded. We recommend that all kitchen, bathroom, outdoor, garage and interior three-pronged receptacles be properly grounded in accordance with current building practice.

GROUNDING - A conducting connection, whether intentional or accidental, between an electrical circuit or equipment and the earth, or to some conducting body that serves in the place of the earth.

GROUND WATER CONTAMINATION - Ground water can be contaminated from leaking underground storage tanks, illegal dumping, poorly contained landfills or hazardous waste spills. Contaminated ground water can be hazardous to one's health if it used for gardening or irrigation. Qualified individuals would have to be retained for evaluation and a determination of what corrective steps may be necessary.

GUSSET - A strap made of metal or wood attached at the connection of roof trusses or rafters or foundation area beams and posts. Gussets will help limit the framing's ability to laterally rack in the event of high winds.

HEAT EXCHANGER - A device by which heat is exchanged from one heat-carrying medium to another without direct contact between the two media.

HIP ROOF - A roof with no gables; usually has inclined planes on all four sides of the building.

HVAC UNIT - A single unit which supplies heating, venting and air conditioning.

INACCESSIBLE - Any area which is not exposed to view or is concealed because of soil, walls, floors, ceilings, carpets, furnishings, storage, or any other things is inaccessible. Inaccessible areas are not included in this inspection. Reportable conditions may be present in inaccessible areas.

INADEQUATE FOUNDATION CLEARANCE - Foundation area clearance between the soil and the wooden framing which is less than eighteen inches. Insufficient clearance does not allow access for inspection or maintenance and creates a condition conducive to moisture damage and decay of wooden members. We recommend that a minimum of eighteen inches of clearance be provided between the soil and the framing. Any damaged wooden material found in the course of this work should be replaced.

INADEQUATE CLEARANCE TO COMBUSTIBLES - Gas-fired appliance vents must be far enough away from combustible surfaces to pre-

vent the heat that these vents carry from causing a fire. Single wall vents should be at least six inches away from combustible surfaces and double wall vents should be at least one inch away.

INADEQUATE COMBUSTION AIR - The oxygen-carrying air which fuel burners need to operate safely. It is normally supplied through venting ducts or openings in walls or doors. We recommend that additional venting be installed.

INADEQUATE FOUNDATION DRAINAGE - Continuous foundation area moisture accumulation causes damage and/or deterioration to the foundation and/or framing. We recommend that the drainage be upgraded as necessary to collect the surface and subsurface moisture approaching the foundation and route it to some central drainage collection point. All damaged foundation and framing should be repaired or replaced as necessary.

INADEQUATE ROOF DRAINAGE - Significant roof ponding can indicate inadequate drainage. Standing water can result in leakage. We recommend that the drainage be upgraded as necessary to properly collect and divert water off of the roof.

INSUFFICIENT ROOF SLOPE - A shingle type roofing surface applied over framing whose pitch is less than three inches in twelve inches. This means that for every twelve horizontal inches the roof fails to rise at least three inches. This roofing surface is subject to leakage because of poor drainage. We recommend that the roof be periodically checked for signs of moisture penetration and patched and sealed as necessary to prevent leakage and subsequent damage. At such time as replacement of this roofing surface is made, we recommend the installation of a conventional built-up or single ply roofing membrane.

INSULATION INSTALLED BACKWARDS - Insulation installed with the vapor barrier pointed away from the living space. This can cause a buildup of moisture and subsequent damage. We recommend that this insulation be repaired and installed with the vapor barrier pointed toward the heated side of the building. Any damaged material found in the course of this work should be replaced.

JOISTS - Parallel, horizontal boards laid edgewise from wall to wall to support the boards of a floor or ceiling.

LAMPCORD WIRING - Unapproved extension cord wiring running along the outside of finished walls, floors or ceilings (sometimes referred to as zipcord wiring). It is easy to overload the wire and the wire is subject to physical damage. All lampcord wiring should be removed. Additional convenience outlets can be installed if desired.

LEAD CONTAMINATION - Lead can be present outside a structure in the soil as a result of automobile exhaust and exterior lead-based paint. Lead paint may have been used on the outside of the building and have found its way into the soil. Proximity to busy roadways can result in automobile emissions elevating lead levels.

LEAD PAINT - Lead-based paint is a hazard when paint chips and particles and dust are ingested by children. Lead accumulates in the blood, soft tissues and bones, leading to damage to the kidneys, brain and central and peripheral nervous systems. Children are more susceptible to the toxic effects of lead paint because lead is more easily absorbed into growing bodies. Precautionary measures include removing lead from children's environment, mopping floors and window sills to remove lead dust and washing hands before eating. Abatement contractors must use

extensive precautions to prevent contamination from lead dust.

LEDGER FLASHING MISSING - The ledger is a piece of horizontal lumber, usually a 2 x 8 or 2 x 10 bolted or nailed to the exterior of a building. Joists are attached to the ledger and the finished decking or stair landing material is secured to the joists. Water seeping behind the ledger can cause damage to the siding and framing. Ideally, the ledger should be flashed at the top edge to prevent moisture penetration.

LOOSE/MISSING/WORN SHAKES OR SHINGLES - A condition conducive to moisture penetration and subsequent leakage into the attic and/or occupied interior. We recommend repair or replacement as necessary to prevent leakage.

MAIN DISCONNECT - A device by which the electrical system can be disconnected from its source of supply. Six or more branch circuits require a main disconnect device.

MASTIC - Asphalt material used to seal around roof connections and penetrations.

MOISTURE BARRIER - Treated paper or metal which retards or bars water vapor. It is used to keep moisture from passing into walls and floors.

MOISTURE MEMBRANE HAS FAILED - The moisture membrane has failed when water has penetrated through the moisture barrier. There may be damaged framing below. All damaged material must be replaced or the damage may spread.

MOSS BUILDUP - Moss retains moisture and can damage the roofing surface. We recommend that the moss be removed.

MULTIPLE LAYERS - Multiple roofing surfaces add extra weight to the roof framing. Too much weight can crack framing members. Most local building departments limit the number of roofing surfaces to three. Some, however, limit it to two. Another problem that can occur with multiple roofing surfaces is the inability to effectively seal the roof connections and penetrations, a critical component of the roofing system.

MULTI-WIRE BRANCH CIRCUIT - An electrical circuit consisting of two or more ungrounded conductors having a potential difference between them and a grounded conductor having equal potential difference between it and each ungrounded conductor. This type of circuit is commonly used to energize the dishwasher and garbage disposal outlet located in the sink base cabinet. A common problem arises when both hot conductors of the circuit are connected to the same pole or leg of the distribution panel. If both the dishwasher and disposal are operated at the same time, the breaker protecting the circuit will not trip. This is a potential hazard and the circuit should be repaired.

NEGATIVE GRADING - Grading which is sloped toward the structure. Low spots and negative grading will increase the chances of water penetration through the foundation, subsequent pooling or puddling in the basement, garage and/or subarea. We recommend that the site be regraded to make sure that surface water runs away from the structure. Any damaged material found in the course of this work should be replaced.

NO SAFETY GLASS - A random sampling of exterior doors and windows and review of individual shower doors revealed some areas which lack safety glass. This is not uncommon in older buildings as safety glass may not have been required at the time of installation. Doors and win-

dows not equipped with safety glass are hazardous if broken. Present industry standards require safety glass to minimize this hazard.

NO UNDERLAYMENT - A tile roof installed directly over the sheathing without an underlayment. An underlayment provides a moisture barrier between the tile and the attic. The manufacturer's specifications may permit this method of installation; however, it is our opinion that without an underlayment, this roof is subject to premature leakage. We recommend that the tile surface and the connections and penetrations be periodically examined by a qualified and licensed roofing contractor for signs of damage and leakage and repairs be made if necessary.

OUTLET (ELECTRICAL) - A switch, light or receptacle.

OVERFUSED - A fuse or breaker too large for the rated capacity of the circuit. This allows too much current to flow through the conductor (wire) before the overcurrent protection device blows or trips. This is hazardous. The rated capacity of the circuit may not have been exceeded yet. However, increased demand on the circuit may result in the conductor overheating which can cause a fire. We recommend that all overfused branch circuits be repaired and equipped with overcurrent protection devices of appropriate amperage.

PAINT/STAIN WEATHERED - Portions of the exterior are weathered, exposed and subject to damage. We recommend that all exposed areas be sealed to provide protection against inclement weather. Prior to the next application of paint and/or stain, we recommend that the exterior be properly prepared.

PANEL RUSTED - All rusted panels should be primed and sealed to prevent further deterioration.

PARAPET WALL - The part of the sidewall of a structure which extends above the roof line.

PARGING - A coat of cement over block foundation walls, or a coat of plaster over stone or brick walls.

PENETRATIONS - Any projection through a roofing surface necessitating flashing, such as plumbing vents and skylights.

PLATFORM FRAMING - A type of framing where each story is built on a platform and the studs run the height of each story.

PLENUM - A large duct or air chamber in which the hot air from the furnace is distributed to the ducting and through the ducts to the registers.

POINT-UP MORTAR JOINTS - To fill and finish the joints between bricks with cement or mortar. Often called Tuck Pointing. We always recommend that this work be done by experienced professionals.

POLARITY REVERSED - An electrical receptacle which has been wired with the hot and neutral wires reversed. Reversed polarity can compromise the grounding of an appliance and cause some electrical equipment to operate improperly. We recommend that the polarity be corrected.

PULL CHAIN LIGHT NEAR WATER - Pull chain lights in rooms with running water are dangerous. Their proximity to running water creates a shock hazard. We recommend that these lights be equipped with approved and grounded switches.

PVC - Rigid white plastic pipe and fittings used for supply of domestic water and yard sprinkler systems and in interior drain, waste and vent systems. Introduced in the 1960's.

RADON - Radon is a colorless, odorless gas that occurs as part of natural decay of uranium. Radon is present to some extent in all soils and groundwater and its levels vary within geographic areas. Radon is classified by the U.S. Environmental Protection Agency as a known carcinogen. There are no immediate symptoms resulting from exposure to radon. Most radon enters the home through cracks and openings in concrete slabs, crawlspaces, sumps and the tiny pores in hollow-wall concrete blocks from the soil underneath. Sometimes radon enters homes through well-water. The level of radon can be measured and mitigation measures taken if necessary. Contact your state Department of Health for a list of radon testing laboratories and mitigation contractors who meet federal requirements. Additional information may be obtained from the U. S. Environmental Protection Agency.

RAFTER - One of a series of inclined structural members which support the roof, running from the exterior wall to the ridge board.

RAISED/CURLED SEAMS - see SURFACE GRANULATION FAILURE

RANDOM SAMPLING - For multiple identical components such as windows, doors, electrical outlets or heating registers. One per room is chosen at random.

RECEPTACLE - An electrical device to receive the prongs of a plug and which is connected to an electric circuit.

REGISTER - A fixture installed at the end of a duct which controls and directs the flow of air into a room.

RELOCATE LIGHT SWITCH - The bathroom light switch is located in the shower receiving wall. This is hazardous. We recommend that the light switch be moved to a safe location.

REPAIR RECOMMENDED - An item which no longer functions as designed or intended and should be repaired or replaced as necessary.

RIDGE BOARD - The horizontal structural member at the top of a roof where the rafters meet.

ROOF PITCH - The degree of slope of a roof.

ROOMS WITHOUT HEAT - Some areas of the structure are without heat. Individual need may necessitate upgrading of this heating system.

ROTATION - A significant number of older foundations were constructed without steel reinforcement and with shallow footings. The weight of the structure was placed on the outer edge of the foundation wall. This design commonly results in some leaning of the foundation. Poor drainage is often times the catalyst for rotation. Rotation does not necessarily mean that the foundation has failed. It does weaken the foundation and it is more vulnerable to excessive moisture conditions and seismic activity. The foundation can be repaired. However, if left unattended, this condition will worsen and may eventually result in a failure of the foundation which would require replacement.

ROUTE DOWNSPOUTS - All downspouts that do not terminate within drain lines should be routed sufficiently away from the foundation to prevent puddling and pooling and subsequent seepage through the foundation and into the basement, garage and/or subarea.

ROUTE TEMPERATURE AND PRESSURE RELIEF VALVE - We recommend that the water heater temperature and pressure relief valve be routed to an approved drain or safely to the exterior. This will help limit damage in the event of a release of the relief valve.

RUNNING SPLICE - An electrical connection made without proper protection. We recommend that all of these connections be repaired and be mechanically protected.

S-TRAP - A sink drain line configuration in which the piping beyond the trap runs vertically instead of horizontally. This can cause the water in the trap to be siphoned out, allowing sewer gas to enter the occupied interior. We recommend that the pipe after the trap be repaired so that it runs horizontally with a slight downward slope until it joins the main drain and vent piping, or that an approved mechanical vent be installed.

SCREEN DOWNSPOUT OPENINGS - All downspout openings should be screened to help prevent debris blockages and subsequent drainage failures within these lines or the drain lines into which they terminate.

SETTLEMENT - Settlement is that instance in which some portion of the foundation drops below the original "as built" grade. This occurs as a result of a loss of bearing - compaction of fill, erosion of supporting soil, and/or dehydration (shrinkage of supporting soil).

SHAKES - Handsplit shingles.

SHEATHING - The material used to cover the outside wall of a frame house or timber roof.

SHOWER RECEIVING WALL - The walls surrounding a shower which, because of their orientation in relation to the shower head, are likely to be wetted by the direct or indirect spray from that shower head.

SIDING EMBEDDED IN THE GRADE - Exterior siding embedded in the exterior grade is subject to moisture damage and pest control problems. We recommend that this condition be corrected. Any damaged material found in the course of this work should be replaced.

SIGN OF SIGNIFICANT NONPERFORMANCE REQUIRING IMMEDIATE CORRECTION - A system or component which no longer functions as designed and intended. All such items require immediate correction.

SILL PLATE - Framing lumber placed on and around the foundation to support exterior wall studs and outer floor joists.

SILT MARKS - When a subarea gets wet enough for water to pond, it can leave a sediment deposit on the foundation walls and foundation area support piers.

SOFFIT - The underside of an overhang of structural members, such as staircases, beams and eaves.

SOIL CONTAMINATION - Soil can be contaminated from leaking underground storage tanks, illegal dumping, poorly contained landfills or hazardous waste spills. Contaminated soil can be a health hazard, especially for children. Qualified individuals would have to be retained for evaluation and a determination of what corrective steps may be necessary.

SOIL PIPE - Pipe carrying organic waste.

SPALLING - Breaking off of the surface of brick or concrete.

SPLITS/CRACKS/TEARS - A roofing surface condition conducive to moisture penetration and subsequent leakage. These need to be repaired as necessary to prevent leakage.

STAIR RAILING UPGRADE - Stairs with four or more steps should have a safety railing. We recommend that an approved handrail be installed.

STAIR/LANDING MOISTURE MEMBRANE FAILED - The moisture membrane has failed. Water has penetrated through the membrane. There may be damaged framing below. All damaged material must be replaced or the damage may spread. Moisture must be prevented from penetrating the framing or additional damage will occur. Our primary recommendation is to install a new moisture membrane. This will stop any further leakage and subsequent damage. It may be possible to seal the surface above, thereby, hopefully stopping further water penetration. However, there is no guarantee that sealing the surface will work and this repair will require frequent maintenance.

STUD - A vertical, framing member in a wall or partition, usually spaced from twelve to sixteen inches apart.

SURFACE GRANULATION FAILURE - An indication of roofing surface wear due to exposure. This wear will continue and leaks may eventually develop. This condition is one indication that the roof is nearing the end of its useful life. Until the roof is replaced, it should be periodically examined by a qualified and licensed roofing contractor for indications of further wear.

TEMPERATURE/PRESSURE VALVE - A safety valve designed to release excess temperature and pressure. Commonly used in water heaters and steam boilers.

THERMOSTAT - An automatic heating/cooling control device. Some units are controlled by clocks to set back the temperature during certain time periods as a fuel-saving measure.

TILE ROOF - Fired clay, stone or concrete roofing material. Tile roofs are highly resistant to wear and have a life expectancy of fifty plus years. However, problems can develop and these problems need attention in order to prevent leakage. Walking on a tile roof may result in some tile breakage; therefore, we examine tile roofs from ground level and other vantage points. We look for cracked and missing tiles and cracked and deteriorated tile mortar joints. We also examine the visually accessible connection and penetration flashings for damage and defects. Problems in these areas create opportunities for leakage and must be corrected to prevent moisture penetration. The watertightness of a tile roof depends to a large degree on the condition of the felt underlayment. The only way to completely examine the underlayment is to remove all of the tile. This, of course, is not practical. We inspect the felt underlayment by lifting up the tiles at a random number of places. If the felt is found to be deteriorated, it must be repaired. Repairing the underlayment requires removing the tile and it may not be possible to reuse the tile. We recommend that tile roofs be periodically examined by a qualified and licensed roofing contractor.

TOILET LOOSE - When a toilet is not securely fastened to the floor, the wax ring seal can deteriorate, causing the toilet to leak. A leaking toilet can damage the floor and the floor framing. A toilet can leak for some time before the damage becomes visible. We recommend that the wax ring seal be replaced now and the toilet be securely fastened before the need for additional costly repairs becomes necessary.

TON OF REFRIGERATION - A measure of the rate of refrigeration equal to 12,000 BTU per hour.

TRAP - A fitting to provide a liquid seal that prevents the back passage of gases, without materially affecting the flow of sewage or water through it.

TRANSITE VENT - A pipe composed chiefly of asbestos and portland cement used to carry products of combustion from gas fired appliances safely to the exterior of a dwelling. Transite vents are not recognized by present code. They are subject to failure because of their absorbency and the effect of the products of combustion on the product binders. The local building department may require replacement of these vents. Asbestos has been determined by the U.S. Consumer Product Safety Commission to be a health hazard. There are a number of choices available in dealing with asbestos. They include leaving it alone, encapsulation and abatement. Removal of this material is a specialized procedure and should be attempted only by a qualified and licensed expert. Information regarding identification of asbestos, its hazards and safe removal may be obtained from the U.S. Consumer Product Safety Commission (800) 638-CPSC, Environmental Protection Agency and other governmental agencies.

TRANSITION BOOT - A rectangular box attached to the end of a duct into which the register is placed.

UNDERLAYMENT - Building material, generally paper or felt, used as a protection against the passage of air and moisture.

UNDERSIZED GAS CONNECTOR - We found an undersized gas connector at one or more of the appliances. The diameter of the gas supply piping should be no smaller than the inlet connection of the appliance. We recommend that the connector be removed and an approved connector installed in accordance with standard building practice.

UPGRADE DRAINAGE - We found excessive moisture in the foundation area. This moisture can damage the foundation and framing, plumbing piping and heating ducts. It is our opinion that there is either insufficient or defective site drainage. We, therefore, recommend that a qualified and licensed drainage engineer be contacted to design and install a perimeter drainage system. This drainage system should collect the surface as well as the subsurface waters approaching the foundation system, and divert them to some type of central drainage collection or disposal point.

UPGRADE THE SHOWER WALLS - We found bathroom shower wall material extends only part way up the receiving walls. This construction detail is conducive to moisture penetration into and subsequent damage in presently concealed areas behind the shower walls. We found no outward indications of leakage or damage. However, with access and an opportunity for examination, reportable conditions may be discovered. If review of these inaccessible areas is desired, this will be performed upon arrangement at an additional cost to the interested parties at such time as access can be provided. Ideally, the shower walls should be upgraded and extended above the shower arm.

UPGRADING RECOMMENDED - These are changes that we feel would be beneficial to the functional use of a system and/or component. They are not required.

VALLEY - A depressed angle formed where two roof planes meet.

VAPOR BARRIER - A material or paint applied to a wall, floor or ceiling

to prevent the passage of moisture. Plastic vapor barriers are sometimes applied over the subarea soil. This helps create a dry air space between damp soil and wood framing and limits the amount of moisture able to rise into the framing, thereby reducing moisture damage. A plastic vapor barrier also provides a reasonable surface upon which to crawl in the event of needed access to a moist subarea. Finally, a plastic vapor barrier tends to keep moist soil from drying out completely and reduces the subsequent shrinkage and cracking that often occurs. This reduces the settlement often associated with expansive soil subject to fluctuating moisture content.

VENT (PLUMBING) - A pipe installed to provide a flow of air to or from a drainage system and to minimize possibilities of trap siphonage and back pressure.

VEGETATION ENCROACHMENT - Vines and/or shrubbery that cover the exterior finished siding, foundation vents, decks, stairways and electrical equipment. This vegetation can cause damage. We recommend that all shrubbery against sidewalls and foundation vents be cut back. Tree limbs and branches that have overgrown or surround the electrical service entrance conductor wires should be removed.

VOLTAGE - Electric power. The greater the speed at which electrons travel, the more power present (240 volts is more powerful than 120 volts).

WARM AIR SYSTEM - A heating system in which air is heated inside a furnace and distributed throughout the house by means of convection.

WASTE AIR GAP - A sink device installed between the dishwasher and the drain line. Its purpose is to prevent the drawing of waste water into the dishwasher.

WATT - The amount of electricity flowing through a line, measured in terms of watts. Volts multiplied by amps equals watts.

WATER HAMMER - A sudden pounding noise in a piping system caused by rapid pressure changes due to very quick closing of valves or other restrictions. It is possible to correct this condition by installing an air chamber.

WATER PRESSURE - 55 pounds per square inch is considered in the mid-range of normal water pressure. Less than 30 psi is considered in the low-range of normal water pressure. This usually occurs as a result of mineral deposits building up inside the domestic water supply piping which restrict the flow of water. The corroded lines eventually will need to be replaced. Excessive water pressure (above 100 psi) puts unnecessary strain on the water heater, water lines and fixtures which can result in leaks. We recommend that a pressure reduction valve be installed in such instances.

WET VENT - A vent that also serves as a drain. Most modern plumbing practices do not permit wet vents. This condition should be corrected.

WOOD FLOOR INSTALLED OVER AN UNKNOWN SURFACE - Ground level wooden flooring that has been constructed on wood framing slightly elevated over an unknown surface below. This type of construction is conducive to framing damage within the concealed areas. We found no evidence to suggest the presence of damage. However, with access and an opportunity for examination, reportable conditions may be discovered. We recommend that portions of the flooring be removed to provide sufficient access to determine the presence and extent of any damage, and any necessary corrective measures.